

R E M A R K S

It is respectfully requested that the Examiner enter and consider the changes made in the claims which are indicated in the Listing of Claims set forth in Appendix I attached to this paper. Accordingly, Claims Claims 74 to 89 and 96 to 99 have been canceled in favor of new Claims 101 to 120, and Claim 95 has been amended to depend upon Claim 90.

Claims 74 to 89 have been rewritten as new Claims 101 to 116 and Claims 96 and 98 have been rewritten as new Claims 117 to 120. Upon rewriting Claims 74 to 89, applicants have replaced the wording "*a stress that controls the expression of the heterologous gene which has been introduced by means of the DNA construct*" of Claims 74 and 78, as well as the wording "*a stress which causes the DNA-construct to express the recombinant protein*" of Claims 82 and 86, in new Claims 101, 105, 109 and 113 by the phrase --a condition of salt-induced stress or of vulneration-induced stress--. Support for the substitute language is provided by applicants' disclosure on page 44, indicated line 20, to page 45, indicated line 18, in conjunction with Figures 9A, 9B and 9C of the application<sup>1)</sup>, and on page 47, line 11, to page 49, indicated line 17, in conjunction with Figures 10 and 11 of the application<sup>2)</sup>. New Claims 102 to 104, 106 to 108, 110 to 112 and 114 to 116 differ from Claims 75 to 77, 79 to 81, 83 to 85 and 87 to 89 solely in the claim from which they depend. Claims 96 and 98 have been rewritten as new Claims 117 and 119. Upon rewriting Claims 96 and 98, applicants have replaced the wording "*and is resistant to stress, as a result of the expression of the DNA construct*" by the phrase --wherein the promoter of the DNA-construct is not repressed under a condition of salt-stress or of vulneration, or wherein said promoter shows a greater activity under a condition of salt-stress or of vulneration than under normal conditions--, corresponding to the changes effected upon rewriting 74 to 89<sup>3)</sup>. New Claims 118 and 120 correspond to Claims 117 and 119 with the difference that the wording --a condition which lacks salt-stress or vulneration-- has been used instead of --normal conditions--. No new matter has been added

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1) Exposure to salt stress induces expression.

2) Exposure to vulneration stress induces expression.

3) The terminology used in the new claims is additionally supported by applicants' disclosure on page 3, indicated lines 19 to 24, and on page 12, indicated line 30, to page 13, indicated line 13, of the application.

The Examiner rejected Claims 74 to 89 and Claims 95 to 99 under 35 U.S.C. §112, ¶1, taking the position that applicants' respective disclosure is insufficient to enable a person of ordinary skill in the art.

The Examiner argued inter alia that a person of ordinary skill would have to conduct an undue amount of experimentation to determine how to select and how to use a "*biotic or abiotic stress*". The Examiner's respective argument is not applicable where the subject matter of applicants' new claims is concerned because applicants' new claims specifically reference conditions of salt-induced stress or of vulneration stress.

The Examiner also argued that salt-induced or vulneration induced RNA expression cannot reasonably be expected from any isolated fragment of the V-ATPase promoter subunit c, isoform 2. The Examiner's respective argument is also not deemed to be applicable where applicants' new claims are concerned. New Claims 101 to 116 specifically refer to DNA constructs as defined in Claim 55, and Claim 55 specifically relates to DNA constructs which comprise the full-length or complete *B. vulgaris* V-ATPase subunit c, isoform 2, promoter according to SEQ ID No. 1. Fragments of the V-ATPase promoter which might lack the stress-inducible structural elements of the promoter as referenced in the Examiner's argument are, therefore, not within the realm of Claim 55.

With a particular view to the subject matter of Claims 96 to 99, the Examiner took the position that applicants' disclosure was insufficient as to whether or under which conditions any particular stress resistance gene might be expressed from the elected promoter to induce stress resistance in the transgenic plants or plant cells. More particularly, the Examiner argued that the specification lacked guidance with respect to the nature of the heterologous gene involved. The respective argument is not deemed to be applicable where applicants' new Claims 117 to 120 is concerned. The plant cells or plants referenced in applicants' new claims are not required to be "*resistant to stress, as a result of the expression of the DNA construct*". Rather, new Claims 117 to 120 reference plants, plant cells and protoplasts which are transformed with the DNA construct as claimed in Claim 55 and wherein "*the promoter of the DNA-construct is not repressed under a condition of salt-stress or of vulneration, or wherein said promoter shows a greater activity under a condition of salt-*

stress or of vulneration" than under normal conditions. The respective properties of the V-ATPase subunit c, isoform 2, promoter are illustrated in applicants' disclosure<sup>4</sup>).

In light of the foregoing, the subject matter of new Claims 101 to 120 is deemed to be properly enabled within the provision of Section 112, ¶1. It is therefore respectfully requested that the respective rejection be withdrawn. Favorable action is solicited.

For essentially the same reasons, the Examiner's rejection of Claims 96 to 99 as failing to meet the written description requirement of 35 U.S.C. §112, ¶1, is not deemed to be applicable where applicants' new Claims 117 to 120 are concerned. The Examiner pointed out that the rejection was predicated on applicants' failure to describe which heterologous gene would confer stress resistance to the plants, plant cells or protoplasts when the gene is expressed under the control of the promoter of SEQ ID No. 1. In contrast to Claims 96 to 99, applicants' new Claims 117 to 120 do not require that the the plant cells etc. exhibit *"resistant to stress, as a result of the expression of the DNA construct"*. According to new Claims 117 to 120 the referenced plants, plant cells and protoplasts are transformed with the DNA construct defined in Claim 55 and the promoter of the DNA construct *"is not repressed under a condition of salt-stress or of vulneration, or wherein said promoter shows a greater activity under a condition of salt-stress or of vulneration"* than under normal conditions as illustrated in applicants' disclosure. The subject matter of new Claims 101 to 120 is therefore deemed to meet the written description requirement of Section 112, ¶1, and it is respectfully requested that the respective rejection be withdrawn. Favorable action is solicited.

The Examiner rejected Claim 95 under 35 U.S.C. §112, ¶2, as being indefinite for failing to define a process step and for depending upon a canceled claim. Applicants have corrected Claim 95 to refer to Claim 90 which defines the lacking process step. Withdrawal of the rejection of Claim 95 under Section 112, ¶2, is therefore respectfully solicited.

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4) Cf. page 44, indicated line 20, to page 45, indicated line 18, in conjunction with Figures 9A, 9B and 9C, of the application concerning salt induced stress, and page 47, indicated line 11, to page 49, indicated line 17, in conjunction with Figures 10 and 11, of the application concerning vulneration induced stress.

In light of the foregoing and the attached, the application should now be in condition for allowance. Early action by the Examiner would be greatly appreciated by applicants.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 11.0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'Dan Kim', written over the printed name.

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Encl.: THE LISTING OF CLAIMS (Appendix I)

HBK/BAS